



A STUDY ON THE KNOWLEDGE AND PRACTICES OF BANANA GROWERS IN FAKHARPUR BLOCK OF BAHRAICH DISTRICT OF UTTAR PRADESH

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Abstract: *Banana is the second important fruit of the world after apples. After rice, wheat and milk products, it is the fourth important food item in terms of total production. This is a very ancient fruit of India whose social and economic aspect is very important. In the northern eastern region of India, banana is used as medicine for the treatment of various diseases. The share of banana in India's total fruit production is 31.72 percent and it is the world's largest banana producing nation. Commercial cultivation of banana occurs in about 23 territories in India in hot and temperate conditions. It is not cultivated in India only where there is excessive cold. There are limitless possibilities for cultivation of banana in the areas of Himachal Pradesh, Punjab, Jammu and Kashmir, Bihar East, and Uttar Pradesh. The study was conducted in Fakharpur block of Bahraich district Uttar Pradesh. Bahraich district being more concentration of banana cultivation in district (4000 ha). From this district, one block, were purposively selected on the basis of large area under banana production. From these block ten villages of banana growers and from each village 12 banana growers were selected for this study. Majority of the respondents (50.00) belong to the medium level of knowledge and (48.33%) were falling under medium level of adoption.*

Keywords:- *Socio-economic status, Knowledge*

INTRODUCTION

Banana (*Musa paradisaca*) is one of the important fruit crop not only in India but also in the world. It is the earliest fruit known to mankind and always been an important part of diet of million all over the world. It is also known as 'Poor man fruit' due to its availability throughout the year, higher nutritive value and low market price. It is delicious and highly nutritive fruit. The banana culture in India is as old as Indian civilization. In India bananas are so predominant and popular among people that are like both by poor and rich alike. Considering the nutritive value and fruit value of bananas, it could be considered as poor man's apple, and this is the cheapest among all other fruits in the country. Banana fruits are available throughout the year unlike seasonal availability of other fruits, it has been become an inevitable necessity in any household in India for all functions. Bahraich district being more concentration of banana cultivation in district (4000 ha). (RKVY, 2018-19)



Research Methodology:

The study was conducted in Fakharpur block of Bahraich district Uttar Pradesh. From this district, one block, were purposively selected on the basis of large area under banana production. From these block ten villages of banana growers and from each village 12 banana growers were selected for this study. Then 120 growers selected from small, medium and large category, respectively. The data were collected personally by interviewing the selected respondents with the help of structure interview schedule. The statistical methods like percentage, frequency were employed for analyzing the data.

Socio-economic status profile of the banana growers:

Table 1 Profiles of the banana growers

Sr. no	Variable	Category	Frequency	Percentage
1	Age	Young(20-35years)	45	37.50
		Middle(36-50 years)	58	48.33
		Old (>50 years)	17	14.17
2	Religion	Hindu	104	86.66
		Muslim	16	13.34
3	Caste	General	57	47.50
		OBC	56	46.67
		SC	7	5.83
4	Education	Illiterate	17	14.16
		Primary	27	22.50
		Middle	39	32.50
		High School	15	12.50
		Intermediate	13	10.83
		Graduate and above	9	7.50
5	Family type	Nuclear	80	66.66
		Joint	40	33.34
6	Farming experience	Up to 5 years	30	25.00
		06-10 years	63	52.50
		Above 10 years	27	22.50
7	Land holding	Below 1 ha	39	32.50
		1-5 ha	76	63.33
		Above 5 ha	5	4.17
8	House type	Kaccha/hut	6	5.00
		Semi- cemented	34	28.33
		Cemented	80	66.67
9	Annual income	1,00,000-3,00,00 Lakh	51	42.50
		3,00,001- 5,00,000 lakh	34	28.34
		Above to 5,00,001	35	29.16
10	Irrigation facility	Pumping set	60	50.00
		Pumping set + Pond	14	11.66
		Tube well	29	24.17
		Pumping set+ Canal	17	14.17



11	Extension contact	Low(4-6)	58	48.33
		Medium (6-8)	39	32.50
		High(8-10)	23	19.17
12	Mass-media exposure	Low(6-9)	40	33.33
		Medium (9-12)	30	25.00
		High(12-15)	50	41.66
13	Social contact	Low(3-5)	38	31.66
		Medium (5-7)	63	52.50
		High(7-9)	19	15.83
14	Economic motivation	Low(5-7.66)	14	11.66
		Medium (7.66-10.32)	30	25.00
		High(10.32-12.98)	76	63.34
15	Market orientation	Low (6-9)	32	26.66
		Medium (9-12)	32	26.66
		High(12-15)	56	46.68

It shows in the Table 1 that 48.33per cent of the respondents belonged to middle age group and 37.50 per cent and 14.17per cent of the respondents young and old age group. It is clear from above table that out of 120 respondents 86.66 per cent belongs to Hindu religion, followed by Muslim 13.34 per cent, 46.67 per cent respondents belongs to Other Backward Caste followed by 47.50 per cent of General caste and 05.83 per cent of Schedule Caste. It was 22.50 per cent were primary school, followed by illiterate were 14.16 per cent, Middle passed 32.50 per cent , High School passed 12.50 per cent, Intermediate passed were 10.83 per cent and Graduate and above were 7.5 per cent. The above table also shows that 66.66 per cent respondents were having nuclear family, while 33.34 per cent were having joint family. Majority 52.50 per cent of the banana growers were in the medium level of farming experience, 63.33 per cent were having medium size of land holding, 67.67 per cent respondents were having cemented house. The data presented in above table revealed that 42.50 per cent respondents were having below 1-3 lakh annual income and 28.34 respondents having annual income of 3-5 lakh followed by 42.50 per cent respondents having annual income of above 5 lakh, 50.00 per cent respondents irrigation with pumping set, 32.50 per cent of the banana growers were in the medium level of extension contact, 41.66 percent and 33.33 per cent of them were in the high and low level of mass media exposure. It is shows that majority (52.50%) of the banana growers were in the medium level of social participation while, 15.83 per cent and 31.66 per cent of them were in the high and low level of social participation, 63.34 percent them were in the high level of economic motivation, 46.68 percent them were in the high level of market orientation.

Table 2: Overall socio-economic status of the respondents of banana growers.

Sr. No.	Category	Frequency	Percentage
1	Low (25-30)	21	17.50
2	Medium (31-35)	71	59.16
3	High(36-40)	28	23.34
	Total	120	100

It is shows that majority (59.16%) of the banana growers were in the medium level of socio-economic status while, 23.34 per cent and 17.50 per cent of them were in the high and low level of socio-economic status. **Atar (2012), Bhosale (2004).**



Knowledge of recommended practices of banana growers:

Table -3 shows that 75.00 per cent respondents had fully knowledge and 16.67 and 8.33 per cent of respondents had partially knowledge 2-4 ploughing with cultivators and similar field well leveled. It is also observed that 57.50 per cent respondents had partially knowledge, and 26.67 per cent and 15.83 per cent of respondent fully and incorrect knowledge pit size 45×45×45 pit size. It is also observed that 42.50 per cent respondents had partially knowledge, 17.50 and 40.00 per cent of respondent fully and incorrect knowledge 1 pit 10 kg FYM & carbofuron. It is revealed that 70.00 per cent respondents had partially knowledge 17.50 and 12.50 per cent of respondent fully and incorrect knowledge sand loamy and well drained soil. It is also observed that 59.16 per cent of respondent partially knowledge while, 28.34 per cent and 12.50 per cent of fully and incorrect knowledge of Harichhal varieties only 100.00 per cent of respondent fully knowledge Grand Naine (G-9) varieties. It is also observed that 60.00 per cent of respondent partially knowledge while, 24.17 per cent and 15.83 per cent of fully and incorrect knowledge of sowing time. It is seen from Table 4.3 that, 53.33 per cent of respondents had partially knowledge while, 38.34 and 8.33 per cent of respondents had fully knowledge the recommended spacing between two rows should be 180 x 180 cm. and similar finding the number of plants per hectare which should be 3000-3200. It is observed from Table 4.3 that 60.00 per cent of respondents fully knowledge suckers while, 30.83 per cent and 9.16 per cent of respondents had partially and incorrect knowledge the suckers/ rhizomes with 500 to 750 gm of weight which should be thick and tapering towards the top. As well as 90.00 per cent of the respondent fully knowledge while, 9.16 and 083 percent of the respondent partially and incorrect knowledge. It is clear from Table 4.3 that 61.66 per cent of the respondents had partially knowledge, 15.83 per cent of respondents had incorrect knowledge and 22.50 per cent of respondents had fully knowledge the practice of application of recommended dose of chemical fertilizer at the time of planting per ha NPK 200:160:200. The application of N in 3 equal parte after planting after 2,3 and 4 months later and given the micro-nutrients. The results from Table 4.3 shows that 22.50 per cent of respondents had fully knowledge and 68.33and 8.30 per cent of respondents had partially and incorrect knowledge irrigation to the plants is 26-30 times/year. It is clear from Table 4.3 indicates that 24.16 per cent of respondents had partially knowledge, 18.33 had fully knowledge and 57.50 per cent of respondents had incorrect knowledge of the sigatoka leaf disease spraying of carbendazim 2gm. It is also indicate from Table 4.3 that 49.16 per cent of respondents had fully knowledge, 41.66 per cent of respondents had partially knowledge and 9.16 per cent of respondents had incorrect knowledge beetles {Carbaryl WP 0.% or Phorate(Thimate-10 G)}. It is also indicate Table 4.3 that 56.66 per cent of respondents had partially knowledge , 16.66 per cent and 26.66 per cent of the respondents fully and incorrect knowledge plant protection from weeds and do not remove green leaves of banana. It shows Table 4.3 that 65.83 per cent of respondents had partially knowledge, 17.50 per cent of respondents had fully knowledge and 16.66 per cent of respondents had incorrect knowledge that the top most leaf starts drying when Trasing. It is observed that 53.33 per cent of respondents had partially knowledge, 32.50 per cent of respondents had fully knowledge and 14.16 per cent of respondents had incorrect knowledge pick up flower of banana in time. It is noticed that regarding support the bunch, 25.00 per cent of respondents had fully knowledge and 40.83 per cent of respondents had partially knowledge and 20.00 per cent of



respondents had incorrect knowledge. It is noticed Table 4.3 further show that 70.00 per cent of respondents had partially knowledge, 20.00 per cent of respondents had fully knowledge and 10.00 per cent of respondents had incorrect knowledge that the top most leaf starts drying as the bunch matures. It shows that Table 4.3, 70.00 per cent of respondents had partially knowledge and 22.50 per cent and 7.50 per cent of respondents had fully and incorrect knowledge that fruit usually mature in 120-140 days after flowering and that the colour of the fruit changes from deep green to light yellow. Table 4.3 further show that 65.83 per cent of respondents had partially knowledge, 17.50 per cent of respondents had fully knowledge and 16.66 per cent of respondents had incorrect knowledge that the top most leaf starts drying as the bunch matures.

Table 3: Distribution of respondents according to their level of knowledge. n=120

Sr. No	Recommended practices		Level of knowledge		
			Fully	Partially	Incorrect
1	Land preparation	2-4 ploughing with cultivators	90(75.00)	20(16.67)	10(8.33)
		Field should be well leveled	90(75.00)	20(16.67)	10(8.33)
		Pit size 45×45×45	32(26.67)	69(57.50)	19(15.83)
		1 pit 10kg FYM& carbofuron	21(17.50)	51(42.50)	48(40.00)
2	Type of soil	Soil-sandy loam. Sandy	21(17.50)	84(70.00)	15(12.50)
3	Varieties	Harichhal	34(28.34)	71(59.16)	15(12.50)
		Grand Naine (G-Naine)	120(100.00)	-----	-----
4	Sowing time	15 June-15 July	29(24.17)	72(60.00)	19(15.83)
		15 July- 15 Aug			
		15 Aug-15 Sep			
5	Spacing	180×180 plants	46(38.34)	64(53.33)	10(8.33)
		160×165 plants			
		150×150 plants			
6	Number of plants per hectare	3000-3200 plants /ha	46(38.37)	64(53.33)	10(8.33)
		3200-3500 plants/ha			
		3500-3800 plants/ha			
7	Types of planting	Suckers & Rhizome	37(30.83)	72(60.00)	11(9.16)
		Tissue culture plants	108(90.00)	11(9.16)	1(0.83)
8	Recommended of FYM	25-30 tone/ha	23(19.16)	61(50.833)	36(30.00)
9	Recommended of fertilizers does	200:160:200- N:P:K	27(22.50)	74(61.66)	19(15.83)
10	Recommended irrigation	26-30 times	27(22.50)	82(68.33)	10(8.30)
		30-35 times			
		35-40 times			
11	Weeding	Manual grass& weed	20(16.66)	68(56.66)	32(26.66)
12	Time of flowering	15 March-15 April	29(24.16)	72(60.00)	19(15.833)
		15 April –15 May			
		15 May – 15 June			



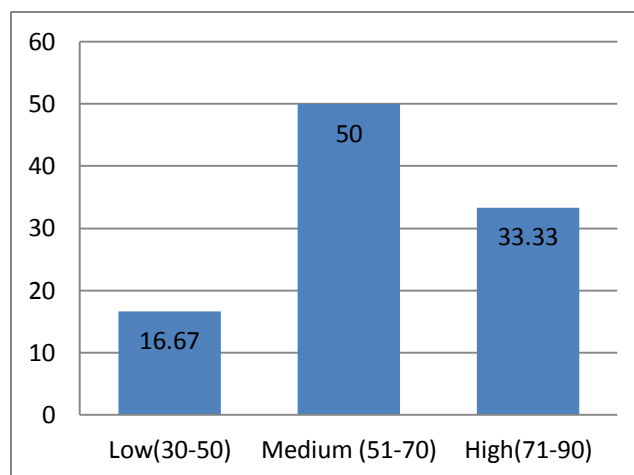
13	Plant protection	Disease :1. Sigatoka leaf spot(carbendazim2gm.)	22(18.33)	29(24.16)	69(57.50)
		2. Bunchy Top (Mosaic Virus) (removed plant)	13(10.83)	87(72.50)	20(16.66)
		3. Panama wilt (carbendazim2gm.)	23(19.16)	39(32.50)	58(48.33)
		Insect/Pest:1. Banana stem borer (malathion 0.1%, 10-15 days)	14(11.66)	70(58.330)	36(30.00)
		2. Beetles (Carbaryl WP 0.1% or Phorate)	59(49.16)	50(41.66)	11(9.16)
14	Maturity indices of harvesting	Disappear of angularity	24(20.00)	84(70.00)	12(10.00)
15	Cultural Practices	1.Propping	47(25.00)	49(40.83)	24(20.00)
		2.Mottoking	20(16.66)	84(70.00)	16(13.33)
		3.Denavaling	39(32.5)	64(53.33)	17(14.16)
		4.Trasing	21(17.50)	79(65.83)	20(16.66)
16	Harvesting time	July – November	27(22.50)	84(70.00)	9(7.50)
17	Production of banana one plant	15-20kg 20-25kg 25-30kg	41(34.16)	66(55.00)	13(10.83)
18	Production per hectare	70-80tone	44(36.66)	63(52.50)	13(10.83)

Table 4: Distribution of respondents according to level of overall knowledge about recommended practices of banana:

Sr. No.	Category	Frequency	Percentage
1	Low(30-50)	20	16.67
2	Medium (51-70)	60	50.00
3	High(71-90)	40	33.33
	Total	120	100.00



Chart 1: Level of knowledge wise distribution of respondents.



It is shows that majority 50.00 per cent of the banana growers were in the medium level of knowledge while, 33.33per cent and 16.67 per cent of them were in the high and low level of knowledge. **Atar (2012), Bhosale (2004), CD Badgujar, (2014), Ghodeswar (2006), Patil (2000).**

CONCLUSION:

From the findings, the profile of banana growers it was observed that majority of the banana growers were having medium level of farming experience, majority (48.33) of the respondents belonged to middle age group and the majority (37.50) and (14.17) of the respondent young and old age group, middle education is maximum and maximum number of nuclear type of family, were possessing land holding of semi medium size. Further, it could concluded that majority of the banana growers were from marginal land holders and majority of the respondents used well as an irrigation source, had medium annual income group. As far as the economic motivation is concerned from medium level. It was also observed that majority of banana growers had medium extension contact and having medium social participation. Most of the banana growers were in the medium use of sources of information and having medium market orientation category. As regards the results, knowledge about recommended banana practices of banana growers indicates that majority 50.00 per cent of the banana growers were in the medium level of knowledge while, 33.33per cent and 16.67 per cent of them were in the high and low level of knowledge. And It was observed that most of the banana growers were in the medium level of adoption of banana package of practices. The study suggests that to update their knowledge and increase their level of adoption which will result in higher banana production.



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